

Appl. No.: 10/618,499
Dated Oct. 4, 2005
Reply to Final Office Action of Aug. 10, 2005

Remarks In Response to the Office Action

A. General Remarks

Claims 1-15, 17-34, 37-39, and 41 are pending in the application. No claims have been amended, added, or cancelled with this Reply.

B. Claim Rejections - 35 USC § 112

Claims 1-15, 17-34, 37-39, and 41 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Final Office Action states that "amended claim 41 introduces the new limitation 'about 0.1 to less than 2% by weight' of the moisture content in the substrate, has no proper antecedent support in the specification as originally presented."

Assignee disagrees with the Examiner's allegation, and Assignee believes that the claims have been improperly rejected under 35 U.S.C. § 112, 1st paragraph. The limitation "about 0.1 to less than 2% by weight" is supported by the originally filed disclosure. In particular, the specification states at paragraph [0015] that "the dehydration step results in lignocellulosic substrate 1 with a moisture content of less than 7% by weight, and more preferably about 0.1-2.5% by weight." Thus, the limitation in claim 41 reciting "about 0.1 to less than 2% by weight" clearly falls within the range of "about 0.1-2.5% by weight" explicitly disclosed in Assignee's specification as originally filed.

For at least these reasons, the claimed range of "about 0.1 to less than 2% by weight" does have proper antecedent support in the specification as originally presented. Accordingly, Assignee requests the rejection of claims 1-15, 17-34, 37-39, and 41 under 35 U.S.C. § 112, 1st paragraph, be withdrawn and all claims in the application be allowed.

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C. Claim Rejections - 35 USC § 103

Claims 1-15, 17-34, 37-39, and 41 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Diehr in view of Mente.

Assignee disagrees with the contention that Diehr in view of Mente renders claims 1-15, 17-34, 37-39, and 41 obvious in so far as the combination of Diehr and Mente does not disclose that a "substrate comprises a moisture content that is about 0.1 to *less than 2%* by weight after the substrate is dried and before the substrate is impregnated with the polyisocyanate material," as recited in independent claim 41, from which all other pending claims 1-15, 17-34, and 37-39 depend.

Diehr discloses that "[b]irch veneers with a moisture content of 7 percent ... are steeped...in a mixture of ... diphenylmethane diisocyanate, ... catalyst ... and ... dimethylformamide" (col. 7:12-16) and discloses that "[b]irch veneers ... with a moisture content of 7 percent ... are steeped...in a mixture of ... diphenylmethane diisocyanate and ... dimethylformamide" (col. 7:28-31).

Mente discloses forming a "resinated lignocellulosic mixture ... by combining the binder resin with lignocellulosic particles having a moisture content of from 2 to 15 weight percent." Mente at Abstract; *see also* col. 2:50-53. Furthermore, Mente discloses that "[i]t is *important* that the lignocellulosic particles have a moisture content of from 2 to 15 weight percent. In a further preferred embodiment the water content is from 3 to 12 weight percent, and most preferably from 4 to 10 weight percent" (emphasis added) Mente at col. 4:34-36. Thus, Mente specifically teaches away from the recited moisture content range of less than 2%.

Therefore, the combination of Diehr and Mente fails to disclose, either alone or in combination, a substrate having "a moisture content that is about 0.1 to *less than 2%* by weight," as recited in amended claim 41. Furthermore,

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the combination of Diehr and Mente fails to disclose, either alone or in combination, that a substrate has such a moisture content "after the substrate is dried and before the substrate is impregnated with the polyisocyanate material," as recited in claim 41. Accordingly, the combination of Diehr and Mente cannot render independent claim 41 obvious because Diehr and Mente do not disclose all of the limitations of independent claim 41. For at least these reasons, independent claim 41 and claims 1-15, 17-34, and 37-39 depending therefrom are believed to be allowable.

Despite the fact that neither Diehr nor Mente disclose moisture contents in Assignee's claimed range, the Examiner has attempted to extend the range of moisture content disclosed in Mente to encompass Assignee's claimed range. Assignee disagrees with the Examiner's basis for making such an extension of Mente's disclosed range of moisture content. The Examiner states that "[w]ith respect to the arguments that Mente teaches away from a moisture content of less than 2%, it is hereby noted that negative teachings are also indication of a known fact taught in the prior art. Thus, the Diehr combination would be obvious over the presently claimed invention." There appears to be no basis in fact or law for the Examiner's position. If the Examiner is relying on personal knowledge to support his allegation of obviousness, the Examiner is requested to provide an Affidavit so stating in accordance with 37 C.F.R. 1.104(d)(2) and MPEP 2144.03.

Assignee has previously argued that Diehr and Mente do not render independent claim 41 obvious because neither references disclose limitations of Assignee's claims, and in particular, do not disclose moisture contents in Assignee's claimed range. This is sufficient to overcome the rejection of the claims for obviousness. However, Assignee has additionally argued that there is no motivation in Diehr and Mente to modify and extend the moisture content

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disclosed in these references to encompass moisture contents of about 0.1 to less than 2% by weight, as required in independent claim 41. In particular, there is no motivation to modify the teachings in these references because: (1) Diehr does not disclose moisture contents in Assignee's claimed range, (2) Diehr explicitly discloses moisture contents in the range of and greater than the range disclosed in Mente, (3) Mente does not disclose moisture contents in Assignee's claimed range, and (4) Mente discloses that moisture contents outside of the range of 2 to 15 weight percent are not desirable.

First, Diehr discloses moisture contents of 7%, 10%, 12%, 15%, and 25%. *See e.g.*, col. 5:35, 50, and 64; col. 6:1, 32, and 65; & col. 7:12-16 and 28-31. Accordingly, Diehr does not disclose moisture contents in Assignee's claimed range.

Second, Mente discloses moisture content in the range of 2 to 15% by weight. *See e.g.*, col. 4:33-41. Thus, Mente does not disclose moisture contents in Assignee's claimed range, and Diehr discloses moisture contents both in the range of and greater than the range disclosed in Mente.

Third, Mente teaches away from any attempt by the Examiner to extend Mente's disclosed range of 2 to 15 weight percent to encompass Assignee's claims range of 0.1 to less than 2% by weight. In particular, Mente discloses:

It is important that the lignocellulosic particles have a moisture content of from 2 to 15 weight percent. In a further preferred embodiment the water content is from 3 to 12 weight percent, and most preferably from 4 to 10 weight percent. The water is utilized during the curing of the binder resin. *If the water content is outside of this range the binder resin is not as efficient at forming the molded article.*

[emphasis added] Mente at col. 4:33-41]

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Thus, Mente discloses moisture contents outside of Mente's disclosed range of 2 to 15 weight percent are undesirable.

Despite the disparity between the moisture contents disclosed in Diehr (e.g., 7%, 10%, 12%, 15%, and 25%) and those disclosed in Mente (e.g., 2% to 15%) and despite the teaching in Mente against extending the disclosed range of 2% to 15%, the Examiner not only combines these references but attempts to extend the moisture contents disclosed in these reference to encompass Assignee's claimed range. The Examiner appears to argue that it would be obvious to not only combine Diehr and Mente but also to extend the ranges disclosed in these reference to encompass Assignee's claims range based on the fact that Mente recognizes that there exist moisture contents outside his disclosed range of 2 to 15 weight percent. As detailed below, the Examiner's reasoning does not present a proper *prima facie* case for rendering Assignee's claims obvious, and the Examiner's reasoning goes against the fact that Mente teaches that values outside his range are not desirable.

First, the fact that Mente merely recognizes that there exist moisture contents outside his disclosed range of 2 to 15 weight percent does not provide the teaching, suggestion, or motivation to combine Mente with Diehr nor to modify Mente's teachings to extend his disclosed range to encompass moisture contents in Assignee's claimed range. The Examiner is apparently arguing that it is a known fact that moisture content can have a value outside Mente's disclosed range. However, the Examiner is arguing in the hypothetical. Under the Examiner's reasoning, any moisture content would be obvious because there is a hypothetical value for it. The possibility of a hypothetical value for moisture content does not render Assignee's independent claim 41 obvious, nor does it provide a basis for the Examiner to combine Diehr with Mente.

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Second, it is recognized that “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01 *quoting In re Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990). The mere possibility of a hypothetical value for moisture content does not provide a basis for the Examiner to modify the disclosed range in Mente. By extending the range disclosed in Mente, the Examiner has directly gone against the explicit teachings in Mente that values outside his range are not desirable. Neither Diehr nor Mente disclose any desirability of having a substrate with moisture content in the claimed range of 0.1 to less than 2.0% by weight. Thus, the combination and modification of Diehr in view of Mente proposed by the Examiner in the Final Office Action is improper because neither Diehr nor Mente suggest the desirability of such.

For at least these reasons, Diehr in view of Mente does not render Assignee’s claims 1–15, 17–34, 37–39, and 41 obvious. Accordingly, Assignee requests that the rejection of claims 1–15, 17–34, 37–39, and 41 under 103 be withdrawn and all pending claims in the application be allowed in the next paper from the Office.

G. Fees

No fees are believed due. However, the undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application. Moreover, should any fees be due for any reason, the undersigned representative authorizes the Commissioner to charge any additional fees that may be required, or credit any overpayment, to Deposit Account No. 501922, referencing order no. 124-0002US-D.

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To facilitate the resolution of any issues or questions presented by this paper, Assignee respectfully requests that the Examiner directly contact the undersigned representative by phone to further the discussion, reconsideration, and allowance of the claims.

Respectfully submitted,

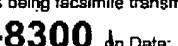
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